

Department of Public Works
Water Division
Laurie Adams, Assistant Director

The Water Services Enterprise Fund accounts for the City's water supply utility of the Department of Public Works. This covers all expenses related to the water treatment plant, two covered reservoirs, two elevated storage tanks, maintenance of the water distribution system consisting of over 100 miles of water mains and associated valves, 1,000 fire hydrants, meter reading, billing and collection.

Major FY13 initiatives for the Water Distribution program were improved by a restructuring of the work group and this led to strategic critical valve replacement and additions. The two valves installed were unique in that they were installed under pressure and caused no interruption of water service. The first valve was at the intersection of Main and Battery Streets and the second was on Lake Street. Another objective scheduled for completion in May 2013 is the directional drilling of an 8 inch HDPE pipe from Central Avenue to Flynn Avenue.

Another initiative that took many years to implement was the change to a safer, more productive work schedule for the 24/7 Water Plant Operations. Whereas in the previous schedule operators had 16 hour stretches, this schedule has 12 hour shifts. The 12 hour shift provides more staff during the daytime hours providing better opportunity for scheduled maintenance, training and communication. Although one can say this change cost more money with the addition of a person, in the long run we may both save money in worker health issues, and have a water plant that is continually at the readiness to serve.

FY14 objectives include activation of the online component from Harris software of our existing Water & Wastewater bill paying module, called e-Pay. This would allow customers to pay by credit card online. At this time, we are not pursuing taking payments via credit card in the office as we do not want to absorb the associated fees. In the Water Production program, work began in FY13 will lead to the replacement of a finished water pump in FY14. A new project for the Water Distribution program includes lining approximately 1,040 feet of 6 and 8 inch cast iron pipe on Central Avenue with a product called ScotchKote Liner by 3M. The estimate for completion of the entire street is \$63,000 versus an open cut of only 215 feet at a cost of \$52,000. This liner is installed via a trenchless, spin-cast process that can eliminate 90% of the excavation, fill and repaving that is associated with open cut replacement.

After deferring capital equipment last year we should not delay essential purchases any further. We are proposing the following in FY14;

1. Hydrant Service Truck- 2002 trade in
2. Excavator – Trade in 2006 Backhoe for an excavator that will allow for less damage on property and a turning radius conducive to more efficient water service, valve and main installations.
3. Trailer (to transport excavator)

Water will continue to reduce the cash pool debt to the General Fund via a combination of the 5% rate increase in FY13 and the last bond payment from the 1982 bond, paid in July 2012. At FY12 Year End, the “due to” balance was a negative \$2.245 M. FY13 is projected to end with a \$700,000 reduction of the cash pool debt. Water was not projected to completely reduce the debt in one fiscal year given the greater need for Wastewater stability. FY14 is projected with a 5% rate increase and deferring some capital infrastructure replacement. This combination is projected to close the shortfall in FY15.

Department of Public Works
Wastewater Division
Laurie Adams, Assistant Director

The Wastewater Services Enterprise Fund accounts for the City's wastewater utility of the Department of Public Works. This covers all expenses for treatment provided by the three wastewater plants, 25 pump stations and approximately 100 miles of sanitary and combined sanitary/stormwater piping.

Major FY13 initiatives for this division included a planned change in how we repaired some of our sewer lines. In the past, the way to repair wastewater pipes was to open cut the road, dig out or around the old pipe and install a new pipe. This is expensive, invasive and inconvenient in almost all cases. In FY13, we completed several projects using the method of "cured in place" rehabilitation of the wastewater pipe system. This process relines the existing pipe with an epoxy impregnated felt liner that, once cured, becomes a "new" pipe. We completed stretches from manhole to manhole on areas of Henderson Terrace, Oakland Terrace, Foster Street, and Ledge Road. Other areas of spot repair included Batchelder Street, Home Avenue, Hardy Avenue, Loaldo Drive, Janet Circle, Dale Road, College Street and N. Willard Street. All totaled, Wastewater reinvested \$143,000 to complete these repairs. Although one can never eliminate the need to dig, this planning process begins with evaluating known trouble areas, following the capital street program and utilizing the sewer line camera wastewater purchased in 2010 to video the condition inside of suspect wastewater pipes.

Wastewater is positioned to eliminate the cash pool debt to the General Fund at the close of FY14. This was made possible in part due to the 5% rate increase enacted in FY13. At FY12 Year End, the due to balance was a negative 1.318 M. Our debt was precipitated by the unsuccessful refinancing of a \$4.6 M balloon payment; this was paid in full in December 2010 instead of the 20 year refinance we sought.

FY14 has one very important objective and that is the timely refinancing of the \$14.5 M balloon payment due January 1, 2014. FY14 is projected with no principal payment on the refinancing and six months of interest payments. In FY14 we plan to continue utilizing the "cured in place" repair of select wastewater lines. The list of potential lines is currently being developed and bids will be solicited in the coming months.

Another important objective involves the Manhattan Landfill and use of methane gas produced at this site. Although this was not on our radar, on February 27, 2012 the City received a Termination Notice of the Landfill Lease Agreement from Burlington Energy. The City quickly dealt with this sudden change in ownership for the two months following notification. Burlington Energy terminated as an entity on May 30, 2012.

In May of 2012 while all this was transpiring the generator was shut down, the flare tested and started, keys were turned over to us while we, as a City, worked on what steps to take next. At the time of this change, there was only one Caterpillar 3412, 248 kW generator and although this particular generator is rated for 248 kW, we believe it will not be able to supply over 150kW for net metering due to a limited available amount of landfill gas.

After meeting with Burlington Electric it appeared that the best first course of action for us as a City would be to file for Group Net Metering. This would allow the Wastewater Division of Public Works (currently monitoring flare and absorbing any costs of this site) to switch from an unfriendly environmental method of handling the methane gas via the flare to restarting to generator and offsetting our costs to run the vacuum system on-site for the well system. There is also the potential of assigning additional energy credit to another Wastewater Burlington Electric bill too. A Group Net Metering Application has been submitted to the PSB and we will work through this process as quickly as it allows.

Wastewater has one piece of equipment a 2003 Service Truck that has been delayed for replacement since 2003. This was reviewed with Equipment Maintenance as the highest priority within that fleet.